

### REMARKS

Claims 1-27 are pending. Claims 8-11 are under consideration.

Claims 8-11 have been amended solely for clarity. The amendments are supported throughout the application. No new matter has been added.

The invention relates to methods of screening for a test gene that encodes a polypeptide that converts a ligand precursor (an inactive form of a nuclear receptor ligand that does not bind to the nuclear receptor) into a ligand (an active form of a nuclear receptor ligand capable of binding and activating the nuclear receptor).

#### *Rejections Under 35 U.S.C. §112, Second Paragraph*

Claims 8-11 are rejected as indefinite. The Examiner asserts that claims 8-11 are incomplete for omitting essential steps. The Examiner states “[the] omitted steps are: that the test gene comprises a sequence which encodes a protein which is to be tested for activity which converts the inactive ligand into the active form.” Applicants submit that the meaning and scope of the test gene would be clear to one of ordinary skill in the art. However, in an effort to expedite prosecution, this rejection has been addressed by amending claims 8-11 to expressly recite that the test gene comprises a sequence encoding a polypeptide to be tested for the ability to convert an inactive ligand precursor into an active ligand, and the cell (not the test gene) comprises the vectors (i) and (ii). Accordingly, Applicants respectfully request that the rejection be withdrawn.

#### *Rejections Under 35 U.S.C. §102*

Claims 8 and 9 are rejected as anticipated by Moore et al. Moore discloses a method of identifying proteins that interact with retinoid X receptor (RXR) in a ligand dependent manner. This rejection is traversed insofar as it may be applied to the currently pending claims. As the Examiner acknowledges, Moore “discloses methods of determining whether a test protein is capable of interacting with a nuclear hormone receptor, the RXR receptor.” Thus, the test proteins of Moore are active ligands, as they bind and activate the RXR. In contrast, the test gene of the present claims comprises a sequence encoding a polypeptide to be tested for the

ability to convert an inactive ligand precursor into an active ligand. Moore's system does not disclose or suggest screening test genes that encode a protein that converts a precursor into a ligand, as presently claimed. Therefore, Moore does not anticipate the present claims.

### *Rejections Under 35 U.S.C. §103*

Claims 8-11 remain rejected as obvious over Moore. The Examiner was not convinced by Applicants' previous arguments for non-obviousness over Moore because "the claims do not make it clear that the test gene comprises a sequence that encodes a protein which is to be tested for activity which converts the inactive ligand into the active form." This rejection is respectfully traversed with respect to the presently pending claims. The claims have now been amended to explicitly recite that the test gene comprises a sequence encoding a polypeptide to be tested for the ability to convert an inactive ligand precursor into an active ligand, thereby overcoming the Examiner's grounds for maintaining the rejection.

As discussed above, Moore does not disclose or suggest screening a test gene that comprises a sequence encoding a polypeptide to be tested for the ability to convert an inactive ligand precursor into an active ligand protein, as claimed. Nor is Moore's system set up to screen the test genes as recited in the claims. Thus, there is no motivation or a reasonable expectation of success for one of ordinary skill in the art to modify Moore in any way, much less in a manner as to arrive at the claimed methods. Accordingly, a *prima facie* case of obviousness has not been made and Applicants respectfully request that the rejection be withdrawn.